State of Hawaii DEPARTMENT OF LAND AND NATURAL RESOURCES Division of Aquatic Resources Honolulu, Hawaii 96813

May 13, 2011

Board of Land and Natural Resources Honolulu, Hawaii

Request for Approval of Special Activity Permit 2011-68 for Dr. Sean Callahan, University of Hawaii, Department of Microbiology, to Conduct Research on State Regulated Stony Corals on Oahu

The applicant proposes to conduct activities relating to research on a stony coral disease known as Monitpora White Syndrome or MWS. The research involves the taking of samples from diseased and healthy corals for comparisons. The samples are about 1.5-inch square fragments, up to 350 samples are authorized, and limited to Oahu sites only.

RECOMMENDATION:

"That the Board authorize and approve, with stated conditions, this Special Activity Permit for Dr. Sean Callahan, University of Hawaii, Department of Microbiology."

Respectfully submitted,

Fancis Outo

FRANCIS OISHI

Program Manager

APPROVED FOR SUBMITTAL:

WILLIAM J. AILA, JR.

Mugaly

Chairperson

NEIL ABERCROMBIE





STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES DIVISION OF AQUATIC RESOURCES 1151 PUNCHBOWL STREET, ROOM 330

HONOLULU, HAWAII 96813

May 13, 2011

TO:

Division of Aquatic Resources File

THROUGH: William J. Aila, Jr., Chairperson

FROM:

Robert Nishimoto, Environmental Program Manager HD + PN
Division of Aquatic Resources

Division of Aquatic Resources

SUBJECT: Declaration of Exemption from the Preparation of an Environmental Assessment under the Authority of Chapter 343, HRS, and Chapter 11-200, HAR, for a Special Activity Permit to Dr. Sean Callahan, University of Hawaii at Manoa, Department of Microbiology.

The following permitted activities are found to be exempted from preparation of an environmental assessment under the authority of Chapter 343, HRS and Chapter 11-200, HAR:

Project Title: Special Activity Permit to Dr. Sean Callahan, University of Hawaii at Manoa, Department of Microbiology, for the taking of diseased tissue samples from the regulated marine coral Montipora capitata from Oahu waters.

Permit Number: SAP 2011-068.

Project Description: The permit, as described below, would authorize the taking of diseased and comparative healthy tissue samples from the regulated marine coral Montipora capitata, from May 13, 2011 through May 12, 2012. The taking of corals is prohibited under section 13-95-70, Hawaii Administrative Rule, unless authorized by a permit issued under section 187A-6, Hawaii Revised Statutes. The study site where the *Montipora capitata* will be removed is in the waters off Oahu.

The purpose of the study is to experimentally test the ability of potentially pathogenic bacteria, which the applicant has identified, to cause the coral disease known as Montipora White Syndrome (MWS). Both healthy and diseased *Montipora capitata* tissue samples will be taken as a comparative study. Up to a total of 350 healthy and diseased samples are authorized, each sample no more than 4cm x 4cm (1.6") fragments. No more than four samples would be taken from each larger sized coral colony to ensure survival. This study may help determine the cause of MWS.

Precautions will be taken to not spread the disease to other marine sites, other species, or other individuals within the same species. The benefits from the study will improve our understanding of the condition and what effects elevated water temperature and nutrient stress have on virulence and transmission.

CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

GUY KAULUKUKUI

WILLIAM M. TAM

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

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The study is being conducted in cooperation with HIMB scientific staff.

<u>Consulted Parties:</u> Not applicable.

Exemption Determination: After reviewing HAR § 11-200-8, including the criteria used to determine significance under HAR § 11-200-12, DLNR has concluded that the activities under this permit would have minimal or no significant effect on the environment and that issuance of the permit is categorically exempt from the requirement to prepare an environmental assessment based on the following analysis:

- 1. All activities associated with this permit have been evaluated as a single action. Since this permit involves an activity that is precedent to a later planned activity, i.e., the repeated methodology of removal of coral samples throughout the permit period, the categorical exemption determination here will treat all planned activities as a single action under § 11-200-7, HAR.
- 2. The Exemption Class for Scientific Research with no Serious or Major Environmental Disturbance Appears to Apply. HAR § 11-200-8(a)(5) exempts the class of actions that involve "basic data collection, research, experimental management, and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource." This exemption class has been interpreted to include removal of alien species, such as those being proposed.

The proposed activities here appear to fall squarely under the exemption classes identified under HAR §§11-200-8(a)(1), 11-200-8(a)(5) and as described under the 1976 exemption list class items. As discussed below, no significant disturbance to any environmental resource is anticipated. Thus, so long as the below considerations are met, an exemption class should include the action now contemplated.

3. Cumulative Impacts of Actions in the Same Place and Impacts with Respect to the Potentially Particularly Sensitive Environment Will Not be Significant. Even where a categorical exemption appears to include a proposed action, the action cannot be declared exempt if "the cumulative impact of planned successive actions in the same place, over time, is significant, or when an action that is normally insignificant in its impact on the environment may be significant in a particularly sensitive environment." HAR § 11-200-8(b) To gauge whether a significant impact or effect is probable, an exempting agency must consider every phase of a proposed action, any expected primary and secondary consequences, the long-term and short-term effects of the action, the overall and cumulative effect of the action, and the sum effects of an action on the quality of the environment. HAR § 11-200-12.

Significant cumulative impacts are not anticipated as a result of this activity, and numerous safeguards further ensure that the potentially sensitive environment of the project area will not be significantly affected. All activities will be conducted in a manner that does not diminish marine resources, qualities, and ecological integrity, or have any indirect, secondary, cultural, or cumulative effects.

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Since no significant cumulative impacts or significant impacts with respect to any particularly sensitive aspect of the project area are anticipated, the categorical exemptions identified above should remain applicable.

4. Overall Impacts will Probably have a Minimal or No Significant Effect on the Environment. Any foreseeable impacts from the proposed activity will probably be minimal, and further mitigated by general and specific conditions attached to the permit. Specifically, all research activities covered by this permit will be carried out with strict safeguards for the natural, historic, and cultural resources, other applicable law and agency policies and standard operating procedures.

<u>Conclusion</u>. Upon consideration of the permit to be approved by the Board of Land and Natural Resources, the potential effects of the above listed project as provided by Chapter 343, HRS, and Chapter 11-200, HAR, have been determined to be of probable minimal or no significant effect on the environment and exempt from the preparation of an environmental assessment.

William J. Aila, Jr. Chairperson,	Date
Board of Land and Natural Resources	

Department of Land & Natural Resources DIVISION OF AQUATIC RESOURCES 1151 Punchbowl Street, Room 330 Honolulu, Hawaii 96813

Date Issued: March 31, 2011

Valid not longer than March 30, 2012

SPECIAL ACTIVITY PERMIT

The Department of Land and Natural Resources hereby grants permission for certain activities involving aquatic organisms belonging to the people of Hawaii, under Section 187A-6, Hawaii Revised Statutes, and other applicable laws.

The Permittee is

Name: Title:

Dr. Sean Callahan

Address: Department of Microbiology

Sci

Scientist

2538 The Mall, Snyder Hall 207

Affiliation: University of Hawaii at Manoa

Honolulu, HI 96822

This permit is issued, subject to the general and special conditions, to take stony coral samples from within the Coconut Island marine laboratory refuge of the following species listed in the table below to study coral viruses:

Common Name	Scientific Name	Number Specimen; see Special Conditions II.A.	Collecting Location Special Conditions II.A.
Rice Coral	Montipora capitata	Max 350 - 4cm x 4cm fragments	Oahu

I. GENERAL CONDITIONS:

- A. This permit does not make the Department of Land and Natural Resources or the State of Hawaii liable in any way for any claim of personal injury or property damage to the permittee or assistants which may occur during any activity conducted under this permit; moreover, the permittee and all assistants agree to hold the State harmless against any and all claims of personal injury, death or property damage resulting from activities of the permittee or any assistant.
- B. This permit conveys a privilege to engage in only those activities under the jurisdiction of the Department of Land and Natural Resources. The permittee is responsible for complying with all applicable County, State, and Federal requirements. The permit does not convey any privilege of access over or through private property.
- C. The permittee and each assistant are individually responsible and accountable for their actions while conducting activities authorized under this permit; additionally, the permittee is responsible and accountable for the actions of the permittee's assistants.

- D. This permit is not transferable or assignable. Any person whose name does not appear on this permit and is conducting any activity described herein is subject to prosecution for violation of State laws.
- E. The permittee may request changes to the permit. Any such request to make changes to the permit must be made in writing and received by the Department at least thirty days prior to the change. The addition of new assistants will require each individual to sign the Attachment on page 6 stating that they have read, understood, and agree to abide by all general and special permit conditions. No change may be implemented without written approval from the Department.
- F. The permittee may request to:
 - 1. Add assistants to the permit;
 - 2. Add another permittee or replace an existing permittee in the manner stated above; and
 - 3. Change the activities authorized under this permit.
- G. The permittee or their assistant(s) must have with them a copy of this permit while conducting activities authorized by this permit.
- H. This permit authorizes take and transport of organisms regulated by Federal law only with prior appropriate Federal authorization.
- I. This permit does not authorize the sale of any collected organism or parts therefrom.
- J. This permit expires on the date indicated on Page 1. Within one month of the expiration date, the permittee must return this permit to the address listed on the upper left corner of page 1 with complete information on all activities authorized under this permit, on the attached Activity Report form.
- K. The permittee and assistants agree to provide access to data obtained under authority of this permit upon request of the Division of Aquatic Resources, and to provide to the Division a copy of each report, published for distribution, prepared with data obtained under this permit. The permittee agrees to provide the Division of Aquatic Resources access to organisms obtained and held under this permit for on-site inspection.
- L. The permittee agrees to notify the island office of the Division of Conservation and Resources Enforcement at least 24 hours prior to any authorized activity being conducted in the field. Please provide the permittee name, the permit number, the date, time, and location of the planned activity, and contact information.
- M. A violation of any terms or condition of this permit or any violation of State law not covered by this permit may result in revocation of the permit and other penalties as provided by law. In addition, the Department may consider any such violation as grounds for denying any future application for this or any other permit issued by the Department. The permit may not be reissued if the permittee is not in compliance

with the terms and conditions of this permit or any other permit issued to the permittee by the department of land and natural resources.

N. The permittee agrees to make every effort to minimize any adverse impacts from activities authorized under this permit, including number of takes, to keep negative impacts to State resources to a minimum.

II. SPECIAL CONDITIONS

- A. This permit authorizes the use of hammers and chisels, other small hand tools, or by hand to take stony coral *Montipora capitata* samples. The samples may not exceed the size and numbers, or species listed on page 1 and may **only** be taken from corals around Oahu and inside the Coconut Island marine laboratory refuge. No more than four samples may be taken from each coral colony.
- B. Of all coral samples taken, the permittee agrees to make five (5) pairs of digital photos of diseased corals, noting the lesion area prior to and immediately after removal from the coral and submit the photos as part of the report as required under General Conditions J. The purposes of the photos are to document visually, the lesions being studied, the degree of infection/symptoms on the coral, and the effects of the sample removal on the coral.
- C. No coral sampling will be conducted within any regulated waters of Oahu, except at the Coconut Island marine laboratory refuge as specified in Special Conditions A.
- D. Chemicals to take samples is expressly prohibited under this permit but may be used on board to preserve samples once taken and to disinfect gear and instruments to prevent spread of disease. The permittee agrees to implement protocols to prevent the spread of disease to other corals, both intra-specific or inter-specific.
- E. The primary permittee and designated assistants are required to obtain permission before entering upon lands or waters not under the jurisdiction of the Department.
- F. This permit does not by implication authorize the primary permittee or any designated assistant to engage in any other activity that is in violation of any other State, Federal or County law, regulation or ordinance.

WILLIAM J. AILA, JR., Chairperson Department of Land and Natural Resources

cc: (x) DOCARE

SIGNATURES AND AGREEMENT

By my signature below, I acknowledge receipt and understanding of the general and special conditions of this Special Activity Permit. Further, I agree to abide by all of these conditions when conducting activities authorized by this permit.

PRINCIPAL PERMITTEES:

Dr. Sean Callahan

DESIGNATED ASSISTANTS:

Signature:	le lette	Signature:	C.K
Print Name:	Greta Aeby	Print Name:	Christina Runyon
Signature:	m 2n	Signature:	Aned Sa
Print Name:	Blake Ushijima	Print Name:	Amanda Shore
Signature: Print Name:		Signature:	
Print Name:		Print Name:	
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ACTIVITY REPORT

Results of all activities performed under authority of this permit must be reported on this form (or copies) within one month after the permit expires (see first page). Use as many sheets as you need. Submit the report to the Division of Aquatic Resources at 1151 Punchbowl Street, Room 330, Honolulu, HI 96813.

Date	Location	Common or Scientific Name	Quantity Collected*	Disposition of Specimens
rmittee	Signature			
	Callahan			
inted na	me	Signature	Date	

^{*}If salvaged (collected because the specimen was dead or injured already), please detail circumstances: condition (dead, or describe extent of injury), how or from whom the specimen was obtained.